

Name: _____

p1028b: Combine Like Terms (v20)

Example

Combine like terms.

$$-4x + 2 - 2 - 8 - x + 6x^2 + 5x - 7x^2 + 3x^2 + 7x$$

Answer

Combine the quadratic terms.

$$6x^2 - 7x^2 + 3x^2 \equiv 2x^2$$

Combine the linear terms.

$$-4x - x + 5x + 7x \equiv 7x$$

Combine the constant terms.

$$2 - 2 - 8 \equiv -8$$

The final result:

$$2x^2 + 7x - 8$$

Question 1

Combine like terms.

$$-5x^2 - 1 + 4 - 8x + 8x^2 - 4x + 9x + 6x^2 - 7 - 2x$$

$$9x^2 - 5x - 4$$

Question 2

Combine like terms.

$$7 + 8x - 9 + 6x - 4 + 4x^2 - 8x^2 + 5x^2 + x + 2$$

$$x^2 + 15x - 4$$

Question 3

Combine like terms.

$$-9x - 3 + 8x^2 + 9 + 3x^2 + 5 - 7x + 4x - x^2 + 6x^2$$

$$16x^2 - 12x + 11$$

Question 4

Combine like terms.

$$5 - 5 + 4x^2 - 7x + 9 - 8x + 2x^2 + 7x - 4x^2 - 2$$

$$2x^2 - 8x + 7$$